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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,462	08/13/2001	Charles E. Schwarz JR.	47004.000142	4155

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EXAMINER
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PAIK, STEVE S

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/927,462	SCHWARZ, CHARLES E.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Steven S. Paik	2876	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
     a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

1. Receipt is acknowledged of the Amendment filed October 16, 2003. The applicant cancelled claims 1-35 and amended claims 36, 39, 41, 50, 53, and 54.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 36, 39-41, 44-47, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, Jr. (US 6,078,888) in view of Walker et al. (US 6,128,599).

Re claims 36, 39, 41, 50, and 54, Johnson, Jr. discloses a tag (RF transponder 100) which is linked to a credit card (tag holder's) to pay for a service, goods, and/or tolls (col. 1, ll. 29-37; in case of a tag for an ETC, it is pre-funded with a preset amount. If the pre-funded amount reaches lower than a predetermined limit, it is replenished by either electronic transfer or cash deposit. Tollbooths in different regions under different administration may be linked to accept one tag for many different tollbooths located and administered under a different administration). Johnson, Jr. further discloses that the tag can be used in association with a loyalty program (col. 12, ll. 10-14) where customers (tag holders) collect bonus points based on the aggregated usages (via purchases and transactions). The bonus points can be redeemed as desired for benefits or privileges at the fuel station store or any other local source. As appreciated by an artisan of

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ordinary skill in the art, many different tags having different and unique functions such as purchasing gas or goods at a fuel station store or paying tolls at a toll gate, may be linked to a single credit card. For example, a family owning more than one automobile may have different tags for each car to pay for gasoline, services, goods, and tolls. They would prefer linking the different tags to a single credit card account for accelerated accumulation of air mileages, purchasing gas at a discounted price, more charitable donations or the like. In general, tags for ETC have different appearance than tags for a fuel store because of their differences in names, logos, and designs.

Although Johnson, Jr. discloses the steps of aggregating tag usage and calculating a reward based on the aggregate tag usage, he does not specifically disclose the how a tag is associated with one collective account.

Walker et al. disclose a method and apparatus for calculating and attributing a customized reward offers to an affinity group of a credit card holder (col. 2, ll. 50-67). Based on the specific criteria of affiliated account holders and method for generating a customized reward offer, the affinity group or a member of the affinity group may receive a predetermined reward. Many credit card issuers offer credit card accounts sponsored by an affinity partner. These credit card issuers believe a credit card holder who is a member of an affinity group is more likely to use his account if it benefits the affinity group sponsor. Credit card issuers further expect higher response rates and reduced attrition rates for credit card accounts sponsored by an affinity partner. Examples of affinity group sponsors include trade groups, alumni associations, religious organizations (charitable organization), sports teams and professional associations (col. 1, ll. 30-38).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ a method of processing customized group reward offers, as taught by Walker et al. in addition to the tags or transponders having association with a credit/debit card of Johnson, Jr. due to the fact that more ways to contribute to a credit card holder's affinity group can be established for the purposes of giving more options to a credit card holder and more retaining opportunities of customer base to a credit card issuer.

Regarding claim 44, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 36 stated above, where at least one tags comprises at least one communication port (I/O port 124 in Fig. 2A of Johnson, Jr.) allowing the at least one of the tags to communicate with other devices.

Regarding claim 45, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 36 stated above, where at least one tags comprises a microprocessor (116 communication controller in Fig. 2a).

Regarding claim 46, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 36 stated above, where at least one tags comprises a transmitter (106 transmitter in Fig. 2a).

Regarding claim 47, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 36 stated above, where the plurality of tags further comprises at least one of a smart card, a bar coded sticker, a transponder (100) readable by a reader/antenna (110 or 112) or combinations thereof.

Regarding claim 51, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 50 stated above, further comprising:

associating each tag with at least one pre-funded account (ETC toll tags have a predetermined threshold amount);

maintaining at least one of the pre-funded accounts (if the pre-funded amount is lower than the threshold amount, it is replenished by automatic fund transfer from a credit card account associate with the tag or more cash deposit) ; and

debiting at least one of the pre-funded accounts in an amount related to the value of purchases (such as passing a toll) made using the associated tag.

Regarding claim 52, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 51 stated above, further comprising associating each pre-funded account with at least one individual account (credit card account), where the account balance of the pre-funded account is replenished (upon transferring funds from the credit card account or depositing more cash) from funds in the individual account upon fulfillment of some predetermined condition.

Regarding claim 53, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 51 stated above, wherein at least one individual account (credit card account) is associated with at least one loyalty program (such as a frequent flyer, discount, a magazine subscription, a rebate program), and the tagholder earns a second reward based on the tagholder's participation in the one or more loyalty programs.

Regarding claim 40, Johnson, Jr. in view of Walker et al. discloses the system and the method as recited in rejected claim 36 stated above, wherein the tagholder selects the organization (a tagholder has an option to link a credit card of his choice with the tag).

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4. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, Jr. (US 6,078,888) as modified by Walker et al. (US 6,128,599) as applied to claim 36 above, and further in view of Akiyama et al. (US 5,745,049).

Regarding claims 42 and 43, the teachings of Johnson, Jr. in view of Walker et al. have been discussed above which includes all the features of claimed invention with the exception of recited elements of the plurality of tags.

Although Johnson, Jr. in view of Walker et al. discloses the tag transponder, he does not disclose the tags comprise an LED and LCD.

Akiyama et al. discloses a tag (transponder 201d in Fig. 8) comprises, among other things, a display (66) using LED or the like and an LCD can be used to show the status, such as "normal condition" or "abnormal condition", etc (col. 10, lines 15-32). It is necessary to have a display means to show a status or data communication in a transponder system. Some of the systems integrate with a reader or interrogator including a display device.

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have substituted the tag disclosed in Johnson, Jr. as modified by Walker et al. with a tag disclosed in Akiyama et al. reference since it is an obvious matter of design choice available in the art to design a transponder with a display using an LED and/or LCD. The desired function of displaying a data communication result or status can be achieved in both methods.

5. Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, Jr. (US 6,078,888) as modified by Walker et al. (US 6,128,599) as applied to claim 47 above, and further in view of Ricci et al. (US 6,463,039).

Regarding claims 48 and 49, the teachings of Johnson, Jr. in view of Walker et al. have been discussed above which includes all the features of claimed invention with the exception of recited elements of the plurality of tags.

Although Johnson, Jr. in view of Walker et al. discloses the tag transponder, he does not specifically disclose the tags comprises a mode of the tags being operated.

Ricci et al. discloses a tag (col. 5, ll. 50-57) operates in a full-duplex communications mode. The full-duplex mode allows the transponder to share a communication channel simultaneously with the interrogator. This obviously increase the amount of data transmitted and received and shortens the time required to exchange data. A transponder is inherently comprised a half-duplex mode communication type.

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have incorporated the tag capable of processing a full duplex mode as taught by Ricci et al. for the purpose of increasing amount of data exchanged using the same amount of time. Since both a half duplex and a full duplex mode are known in the art, it is an obvious matter of selecting a required mode according to the specific needs of a user. If a user is interested in increasing communication speed, then he or she will obviously choose a full duplex mode.

6. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, Jr. (US 6,078,888) as modified by Walker et al. (US 6,128,599) as applied to claim 36 above, and further in view of Khan et al. (US 6263,316).



Regarding claims 37 and 38, the teachings of Johnson, Jr. in view of Walker et al. have been discussed above which includes all the features of claimed invention with the exception of recited elements of the plurality of tags.

Although Johnson, Jr. in view of Walker et al. discloses the tag transponder, he does not specifically disclose the tags comprises a sound-generating device.

Khan et al. discloses a transponder (31 in Fig. 3) comprises a sound generating device (39 speaker) for the purpose of alerting its user by generating an audible tone or message.

Furthermore, the audible tone or message can be shown via a display screen (34 and col. 3, lines 49-60).

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have incorporated the tag capable of generating an audible tone or message along with a visual message to inform its user the result of data communication, as taught by Khan, in addition to the tag (transponder) of Johnson, Jr. in view of Walker et al. for the purpose of informing a tag holder about the status of data read by a reader with both audible and visible signal. Accordingly, the tag holder is better informed of current status and more ready to take the next step to complete his intended transactions using the tag and its reader.

#### ***Response to Arguments***

7. Applicant's arguments filed October 16, 2003 have been fully considered but they are not persuasive.

#### **Claims 36, 39-41, 44-47 and 50-54**

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The applicant argues that the cited prior arts (USPN 6,078,888; 6,128,599; 5,745,049; 6,463,039; 6,263,316) taken alone or in combination with other reference fail to disclose the claimed invention. The examiner respectfully disagrees.

On page 9, the applicant states, "there is no disclosure in Johnson (US 6,077,888) of a reward based on aggregate tag usage of a tag regardless of point of purchase, but rather discloses loyalty benefits awarded to a tagholder based only on aggregate usage at the business of the sponsor of the loyalty program.". Johnson discloses that the bonus points may be redeemed as desired for benefits or privileges at the fuel station or any other local source. Therefore, the reference does not limit the redemption of the points aggregated by usages of the tag. Furthermore, the claims do not recite the limitations applicant argued in the Remark section of the Amendment.

On pages 10 and 11, the applicant argues, "the invention claimed in independent claims 36, 50 and 54 is based on the aggregate usage of the tag with multiple merchants". Claim 36 does not recite the aggregating usage of the tag with multiple merchants. Neither claim 50 nor 54 recites the aggregating usage of the tag with multiple merchants. Rather, claims 50 and 54 recite, "wherein tag usage comprises purchasing at least one of goods or service from one or more merchants;" which is different from a limitation of multiple merchants. In addition, the cited references read on the claimed limitation since the tag in the reference aggregates the usage with at least one merchant.

**Claims 37, 38, 42, 43, 48 and 49**

Dependent claims 37, 38, 42, 43, 48 and 49 remain rejected as discussed in this Office Action. Applicant argues that the dependent claims are allowable due to their dependency with

respect to independent claim 36. As shown above, the examiner interprets the cited references can still be read on the claimed features. Accordingly, claims 36-54 remain rejected under 35 U.S.C. § 103 (a).

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

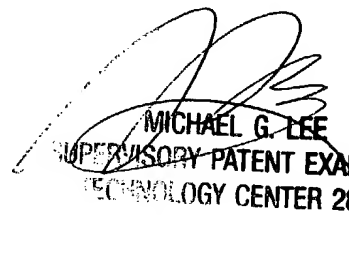
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.



Steven S. Paik  
Examiner  
Art Unit 2876

ssp  
December 12, 2003



MICHAEL G. LEE  
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